

ABSTRACT

A flow tube (3) composed of a bent tube having a shape symmetrical with respect to a first axis is supported at its both ends by support portions (8, 8) having an outlet and inlet respectively. A drive device (4) for alternately driving the flow tube (3) rotationally about a second axis connecting the positions where the flow tube (3) is supported is disposed on the vertical axis of a Coriolis flowmeter (1).

A pair of second drive devices (5, 5) for alternately driving the flow tube (3) rotationally are disposed at positions laterally symmetrical with respect to the drive device (4). The paired second drive devices (5, 5) are driven in phase; the drive device (4) is driven with the opposite phase to those of the second drive devices (5, 5). A pair of vibration detecting sensors (6, 6) are disposed between the drive device (4) and one of the second drive device (5) and between the drive device (4) and the other (5) respectively. The sensors (6, 6) detect vibrations with phases the difference between which is in proportion to the Coriolis force acting on the flow tube (3) disposed laterally symmetrically with respect to the drive device (4).